

an opportunity as new entrants to apply for improved facilities.⁸⁴ The Commission has been very reluctant to preclude existing service providers from entering a new service because of competitive concerns.⁸⁵

In deciding whether to restrict or prohibit entry of an existing service provider into a new, related service, the Commission has typically engaged in an extensive competitive analysis of the markets involved.⁸⁶ Even where there are compelling competitive concerns that the Commission has found to warrant eligibility restrictions, such restrictions have typically been limited in extent.⁸⁷ Moreover, the Commission has recently found eligibility restrictions in a number of cases to have outlived their usefulness.⁸⁸

Accordingly, the Commission should not impose restrictions on eligibility for PCS licenses. Moreover, open eligibility will also further the core goal if auctions are used for licensing. By

⁸⁴ *Amendment of Part 73*, MM Docket 83-1148, *Report and Order*, 98 FCC 2d 916 (1984); *FM License Upgrading*, MM Docket 85-313, *Report and Order*, 60 RR 2d 114 (1986); *Community of License*, MM Docket 88-526, *Report and Order*, 4 FCC Rcd. 4870 (1989); *AM Technical Standards*, MM Docket 87-267, *Report and Order*, 6 FCC Rcd. 6273 (1991).

⁸⁵ *E.g.*, *Digital Termination Systems*, 86 FCC 2d 360, 386-87 (1981) (entry of telephone companies into DEMS), *recon. in part*, 90 FCC 2d 319 (1982); *Low Power Television Service*, BC Docket 78-253, *Report and Order*, 51 RR 2d 476, 517 (1982); *Instructional Television Fixed Service*, Gen. Docket 80-112, *Report and Order*, 94 FCC 2d 1203, 1256-58, 1262 (1983) (entry of existing MDS and cable operators into MMDS), *recon. in part*, 98 FCC 2d 129 (1984).

⁸⁶ *Cellular Communications Systems*, CC Docket 79-318, *Notice of Inquiry and Notice of Proposed Rulemaking*, 78 FCC 2d 984, 988-95 (1980); *Report and Order*, 86 FCC 2d 469, 484-86 (1981), *recon. in part*, 89 FCC 2d 58 (1982), *further recon.*, 90 FCC 2d 571 (1982), *appeal dismissed sub nom. United States v. FCC*, No. 82-1526 (D.C. Cir. 1983).

⁸⁷ *E.g.*, *Domestic Communications-Satellite Facilities*, Docket 16495, *Second Report and Order*, 35 FCC 2d 844, 851-52 (1972) (prohibited AT&T's use of satellites for domestic switched services for up to three years).

⁸⁸ *Telephone Company-Cable Television Cross Ownership*, CC Docket 87-266, *Second Report and Order, Recommendation to Congress, and Second Further Notice of Proposed Rulemaking*, 7 FCC Rcd. 5781, 5848-51 (1992) (recommending elimination of statutory cable-telco cross-ownership ban); *Revision of Radio Rules and Policies*, MM Docket 91-140, *Memorandum Opinion and Order and Further Notice of Proposed Rule Making*, FCC 92-361 (released Sept. 4, 1992), *modifying Report and Order*, 7 FCC Rcd. 2755 (1992) (eliminating ban on ownership of more than one AM and one FM station per market).

permitting the widest possible variety of parties to bid for spectrum the Commission is likely to elicit the highest-valued and, therefore, most publicly beneficial use of the spectrum. This will serve the public interest by ensuring the highest and best use of spectrum through the interplay of market forces at and after the auction.⁸⁹ It will also tend to maximize revenue from the auction, thereby benefitting the public fisc.

2. Cellular Carriers Should Be Eligible

The core goal of this proceeding, and the FCC's four values will be served by allowing cellular carriers to hold PCS licenses within their service areas.⁹⁰

a. Universality

The participation of cellular carriers will contribute to the universality of PCS offerings. From the perspective of PCS coverage that is geographically universal, cellular carriers may play a critical role. There are two cellular carriers in each area of the United States. These companies have established sales networks in their areas for the provision of wireless communications.

Cellular carriers will also contribute to the universality of PCS in another sense. Their participation in PCS will ensure that a wider variety of services will be provided under the PCS rubric than would be the case otherwise. Cellular carriers have learned from their customers (and potential customers) and will continue to learn, what services are needed. These include services that cannot be made available via a cellular system at prices that would make them attractive, or services that cellular systems are not suited to provide at all. Cellular carriers have an incentive to provide such communications services because expanding the range of services they offer is critical to satisfying their customers and attracting new customers. Excluding cellular carriers from the ranks of PCS

⁸⁹ See NERA Study at 2-3, 33-35.

⁹⁰ The FCC did not propose restricting cellular carriers' eligibility for PCS licenses outside the areas where they provide cellular service.

providers would deprive the PCS industry of this needed perspective and thereby diminish the universality of PCS.

b. Speed of Deployment

The objective of rapid deployment would be served by including cellular carriers as potential PCS licensees for several reasons. First, as noted above, cellular carriers, like cable television operators, newspapers, and others, have sales operations in place in every market. The cellular carriers' local representatives can educate the public and develop a market for the new services that PCS can deliver, in every part of the nation, faster and more effectively than would be the case if only new entrants, without any significant presence in the local wireless service market, could be PCS providers. Including cellular carriers will result in spreading the word earlier because the carriers' local organizations will be able to "hit the ground running" with the PCS message as soon as they receive licenses. Excluding them, on the other hand, will delay the popularization of PCS, because a newcomer will basically have to duplicate the cellular carrier's local marketing organization before it can begin publicizing PCS.

Second, speed of deployment will be enhanced by cellular carriers' eligibility in-market because cellular carriers have gained invaluable practical knowledge about both their markets and the provision of wireless service. Cellular carriers' experience is transferable to the PCS business. As noted above, cellular carriers know what additional services their customers and potential customers want and need. Cellular carriers know from *experience* where in their markets wireless services are needed, who needs them, and what type of services can be profitably offered. If cellular carriers are excluded from providing PCS in the markets whose needs and characteristics they know intimately, it will take far longer for PCS to be tailored to the needs of those markets.

Cellular carriers can contribute to speedy deployment of PCS for a third reason: they may have a lower cost and require less time for initial deployment of PCS because of their existing

business structures and other economies of scope and of scale. Cellular carriers have accounting and billing systems and other support mechanisms in place that have been specifically designed for operation of large-scale wireless communications businesses. Their management structures, likewise, are oriented toward the localized provision of wireless communications. They have assembled teams of engineers, site acquisition specialists, technicians, and other support personnel whose skills would be valuable for supporting PCS implementation and operation. Furthermore, some of the physical infrastructure used for cellular service, such as switching offices, cell sites, microwave plant, and interconnection facilities, may be suitable for PCS operations.

The fourth reason why cellular carriers' participation is important to the speedy deployment of PCS is that, unfortunately, their exclusion will very likely lead to litigation. Litigation was one of the reasons for delay in cellular licensing.⁹¹ BellSouth does not suggest that the Commission should adopt a policy merely to minimize the risk of litigation. However, if speed of deployment is an important factor, the Commission needs to weigh the potential for delay due to litigation along with other factors. Inclusion, rather than exclusion, of cellular carriers will tend to expedite PCS licensing.

c. Diversity

The Commission's third value — diversity — militates in favor of the inclusion of cellular carriers in the roster of PCS eligibles as well. As discussed above, cellular carriers have a unique perspective on PCS. While a new entrant might view PCS from the perspective of drawing customers away from the existing cellular carriers, the cellular carriers will likely develop PCS as a way of broadening the menu of available wireless services. In so doing, they are likely to focus on PCS

⁹¹ The Commission's allocation of spectrum for developmental cellular systems was adopted in 1974. The exclusion of non-wireline carriers resulted in petitions for reconsideration, which were resolved in 1975. Court appeals concerning the allocation were not resolved until 1976. The first developmental systems were not licensed until 1977, three years after the allocation was adopted, and a considerable part of that delay was due to the legal controversies involved. See *Land Mobile Radio Service*, Docket 18262, *Second Report and Order*, 46 FCC 2d 752, 760 (1974), *recon.*, 51 FCC 2d 945, *clarified*, 55 FCC 2d 771 (1975), *aff'd sub nom. NARUC v. FCC*, 525 F.2d 630 (D.C. Cir.), *cert. denied*, 425 U.S. 992 (1976).

applications that may be overlooked by the new entrants — niche services and low-mobility services that cannot be economically provided as auxiliary services over their cellular networks. Thus, their inclusion as potential PCS licensees will lead to a more diverse network of suppliers and to a more diverse supply of available services.

d. Competitive Delivery

Cellular carriers' eligibility will serve the Commission's fourth objective, as well: competitive delivery. Cellular carriers will have every incentive that new entrants have to compete vigorously and fairly in a multi-provider PCS marketplace.

Allowing cellular carriers to participate as PCS providers will strengthen the competitive posture of the United States in the international market for wireless communications business, consistent with Section 7 of the Act. United States companies seeking to participate in wireless markets abroad must, in order to succeed, have a level of experience commensurate with, or exceeding, their competitors. Indeed, many foreign governments seeking cellular bidders require a demonstration that bidders hold cellular licenses in their home countries. To date, BellSouth has been able to take advantage of its experience in the domestic cellular business in its successful ventures into the international wireless market⁹² and hopes, in the future, to be able to market its expertise in operating combined PCS/cellular systems. Clearly, the national interest would be disserved by preventing U.S. companies from developing expertise that would benefit the U.S. trade position.

Domestic competition will not be adversely affected by cellular entry into PCS. If there are multiple competitors, no single provider will have the ability to set prices at supracompetitive levels. An economist could characterize PCS as a market in which the participants first establish a design capacity for their networks and then compete for a market share large enough to fill that capacity.

⁹² See note 6, *supra*.

In the first stage, each competitor attempts to estimate both the size of the market and its potential share of the market and designs its system to accommodate that share. In the second stage, if there are five competitors, each provider will tend to drive prices toward cost until it reaches capacity. The competitors have a strong incentive to gauge demand and market share correctly. Capacity substantially exceeding that needed is penalized in the second stage by higher unit costs, which reduce the affected competitor's ability to remain competitive on price while making a profit. Building too little capacity is penalized by lowered market share. A competitor who sought to charge supracompetitive prices would rapidly lose market share to its less-expensive competitors. A cellular carrier as a PCS licensee will not have the ability to retard the growth or capability of PCS, because the other competitors will exploit any opportunity untouched by the cellular carrier.

While it is true that cellular carriers have the ability to offer certain forms of PCS as an auxiliary service over their existing cellular systems,⁹³ their ability to do so is severely constrained. Cellular carriers are obliged to provide compatible service to a vast embedded base of analog mobile and portable units, including their own customers and roamers. This service obligation is currently required by the rules,⁹⁴ but the obligation would likely remain for many years to come for economic reasons even if the rule were eliminated.⁹⁵

⁹³ See 47 C.F.R. § 22.930.

⁹⁴ 47 C.F.R. § 22.930; see §§ 22.915, 22.911(b).

⁹⁵ Cellular carriers have cumulatively invested billions of dollars in equipment and cell sites, and their customers have similarly invested billions of dollars in mobile and portable phones. These investments cannot simply be written off. More importantly, the cellular carriers cannot afford to alienate their customer base by rendering existing mobile and portable units obsolete. Cellular carriers have begun to increase capacity by introducing digital technology, while at the same time living up to their commitment to continue serving analog customers. If the legal requirement to provide analog service were to end, carriers might phase out analog service at large costs and after a transition period that accommodated the needs of analog customers. During that transition period, a substantial portion of a cellular carrier's 25 MHz of spectrum must be reserved for analog cellular service, limiting the amount of spectrum that can be used for digital cellular service or low-power forms of PCS.

Moreover, even without considering analog cellular service requirements, cellular carriers are not now, and will not be, for the foreseeable future, practicably able to offer low-power PCS to a large customer base. The demand for full-featured high-mobility cellular service is continuing to grow at a rapid rate, and cellular licensees are investing in digital technology to meet that demand.

Thus, while cellular systems offer a service that can be categorized as Existing-PCS, they only can be considered capable of competing in the New-PCS market in limited respects.⁹⁶ Cellular service and low-power PCS appear to be essentially distinct product markets.⁹⁷ Accordingly, cellular service cannot be reasonably viewed as part of the "relevant market" for purposes of a competitive analysis of PCS.⁹⁸

Under these circumstances, the Commission's concerns regarding cellular carriers' competitive role with respect to PCS appear to be unfounded. There would appear to be no competitive reason

⁹⁶ Some potential customers' needs might be met by either cellular service or lower-cost, less full-featured service. Some of these customers are currently cellular subscribers. With the introduction of low-cost, limited-mobility PCS, cellular providers and PCS licensees will be in competition for these customers to some degree. This will, to some extent, result in price competition between cellular and PCS, which may lower cellular prices somewhat more rapidly than would otherwise have been the case. However, cellular carriers will have only a limited ability to compete for these customers on the basis of price because of the higher overhead and capacity limitations resulting from an architecture primarily designed for high-mobility cellular service and their obligation to continue providing analog cellular service.

As a result, cellular systems and new PCS licensees will be competitors only to a very limited degree. This conclusion is borne out by a recent market forecast prepared by Telocator. The forecast shows cellular service prices in 2002 remaining 14-67% higher than the price for "personal telecommunications service" and as much as three times as expensive as telepoint service. *PCS Demand Forecast, supra*, at Matrices 1, 2. The projected cellular prices for 2002 are lower than today's prices, but the decline in prices does not appear to reflect a major competitive impact from the introduction of PCS, given that cellular prices have been declining consistently over the last ten years.

⁹⁷ It is unclear how large the potential customer base is that can be equally well served by cellular and newer forms of PCS. BellSouth believes that the size of this market segment is relatively small compared with the segments whose needs can be better served by one or the other, and that there is, accordingly, only limited cross-elasticity of demand among the two services.

⁹⁸ Cf. *Cellular Communications Systems*, 86 FCC 2d at 484-86 (determination of "relevant market" for cellular); *Instructional Television Fixed Service*, 94 FCC 2d at 1256-58 (for MMDS).

for restricting cellular carriers from being eligible for PCS licenses, particularly if the Commission authorizes as many as five licensees.⁹⁹

3. Local Exchange Carriers Should Be Eligible

Allowing local exchange carriers ("LECs") to hold PCS licenses in their exchange areas will also serve the FCC's objectives.¹⁰⁰

a. Universality

The first value the FCC seeks to advance — universality — will clearly be advanced by including LECs as eligible providers. LECs have a presence in every part of the United States and have truly ubiquitous networks in place in their exchange areas. The goal of universality will clearly be served by allowing the nation's telephone companies to develop their facilities to their full potential for the provision of PCS. Allowing LECs to apply for PCS licenses will ensure that companies with a direct and immediate interest in providing quality telecommunications service throughout every community in the nation are not foreclosed from the opportunity to participate in providing PCS. Moreover, as BellSouth explains below, allowing LECs to enter the PCS business will encourage them to develop efficient, competitive PCS support networks. This will have the effect of lowering the cost of providing PCS services. As a result, the overall cost of PCS will be lower and it will be available to more customers, a critical factor in making PCS into a low-cost, mass-market service.

⁹⁹ The Commission observed in the *NPRM* that licensing a large number of PCS providers would lessen any potential need for restricting cellular carriers' eligibility. *NPRM*, 7 FCC Rcd. at 5690. While BellSouth does not believe that there are valid reasons for restricting cellular carriers' eligibility even with a smaller number of licensees, it agrees that even an overly cautious view of the competitive structure of the PCS market would not warrant restricting eligibility if there are five licensees.

¹⁰⁰ As with cellular carriers, the FCC did not propose to consider restricting local exchange carriers' eligibility for PCS licenses outside their telephone exchange areas.

b. Speed of Deployment

The value of speedy deployment will be furthered by deeming LECs eligible. LECs are already going businesses in their exchange areas and they will be able to educate their customers about PCS rapidly. Thus, they will be in a position to develop a market for new services much more quickly than licensees without a local presence. LECs have personnel and facilities that offer substantial economies of scale and of scope in providing PCS. LECs also have experience that is directly transferable to the provision of PCS in their markets which will shorten the learning curve in tailoring PCS to the needs of local consumers and facilitate the deployment of PCS.

In order to take advantage of economies of scope and of scale, PCS infrastructure must, effectively, be based on another network, such as the PSTN, a cable television system's network, or a competitive access provider's network, that has been adapted, as the Commission put it, "in a PCS-friendly way."¹⁰¹ The large number of transmitter sites in a PCS system and the requirements for switching, transport, and network intelligence associated with the PCS infrastructure mean that a PCS system will have to be very heavily reliant on, and interrelated with, its support network.¹⁰² LECs' switches and distribution plants, with the development of some specialized network intelligence, will offer substantial economies of scope when used to support the prompt development of PCS offerings.

BellSouth agrees with the Commission that allowing LECs to be licensed to provide PCS will encourage them to develop their wireline networks as suitable infrastructures for delivery of PCS.¹⁰³ BellSouth believes that this will result in much more rapid deployment of service. It will also result

¹⁰¹ *NPRM*, 7 FCC Rcd. at 5705. Electric utilities may also have some economies of scope or of scale in establishing a PCS infrastructure, in that they have relatively ubiquitous networks of utility poles and ducts that could be used for routing a fiber-optic or coaxial-cable support network. Some utilities have already established fiber-optic networks, although these are typically not sufficient in scope to support PCS. In addition, utility poles could be used to mount small low-power microcell base stations.

¹⁰² See NERA Study at 31-33.

¹⁰³ *NPRM*, 7 FCC Rcd. at 5705.

in a lower cost structure for the delivery of PCS by all providers because all of the competing PCS licensees will have available to them a more competitive and diverse array of "PCS-friendly" infrastructure support options from which to choose than if the LECs were restricted from becoming involved in PCS.

c. Diversity

Allowing LECs to hold PCS licenses will serve the Commission's goal of diversity in the same manner as allowing cellular carriers to participate as licensees. LECs will have a different perspective on PCS because of the way in which various forms of PCS complement the LECs' current service offerings. Thus, excluding the LECs will deprive the market of not only a class of providers, but also of the LECs' individual approaches to the provision of PCS service offerings. Permitting the LECs to hold PCS licenses will thus contribute to an increase in diversity of both providers and services. This will clearly serve the public interest.

d. Competitive Delivery

Finally, the Commission's goal of competitive delivery of service will be served by allowing LECs to serve as PCS licensees.¹⁰⁴ An LEC holding a PCS license would be a vertically integrated company that competes at the retail level, in that it provides retail PCS services to subscribers in competition with other PCS licensees. However, it also provides the wholesale service of interconnection with the PSTN (and possibly other aspects of PCS infrastructure) to both its own PCS operation and to competing PCS providers.¹⁰⁵

¹⁰⁴ The Commission said it expected that "PCS primarily will complement LEC-provided wire loops, while over time PCS may become a full fledged competitor to wireline services," and it raised concerns regarding potential discrimination against PCS competitors in interconnection. *NPRM*, 7 FCC Rcd. at 5705. For purposes of analysis herein, BellSouth has separately addressed issues concerning vertical integration (*i.e.*, providing both interconnection and PCS) and horizontal competition (*i.e.*, PCS as a competitor with the LEC's landline network).

¹⁰⁵ For purposes of this discussion, the LEC is assumed to be the sole provider of interconnection. In reality, there will be other sources of interconnection and infrastructure, such as competitive access providers, interexchange carriers, cellular carriers, and cable television operators.

The NERA Study in Appendix IV shows that while the vertically integrated firm may have the opportunity to act anticompetitively by overpricing interconnection, it would have an economic disincentive to do so.¹⁰⁶ This conclusion is borne out by the experience of the cellular and paging industries. NERA found that in these businesses, there is no evidence that such anticompetitive behavior has occurred.¹⁰⁷ Indeed, the fact that LEC affiliates have invested heavily in out-of-region cellular systems suggests strongly that the mere potential for anticompetitive interconnection practices has not quashed the attractiveness of cellular retail operations.¹⁰⁸

NERA also suggests that anticompetitive interconnection effects can be detected and prevented through relatively unburdensome nonstructural safeguards. To the extent the Commission is concerned about the potential for anticompetitive interconnection practices in vertically integrated LEC/PCS systems, BellSouth suggests that the Commission adopt policies such as those set forth by NERA to detect and deter cross-subsidies and discrimination in interconnection.¹⁰⁹

Horizontal anticompetitive effects are unlikely to occur as a result of possible PCS competition with LECs' landline service. It is noteworthy that the Commission addressed this issue

¹⁰⁶ See NERA Study 24-25. Briefly, if the interconnection is priced too high, the LEC would not maximize profits by increasing sales of its own PCS service, but rather by providing interconnection to the competing retail PCS licensees, thereby improving the other companies' position in the competitive retail market. If an LEC does reduce the price of its own PCS service below cost to increase market share and ultimately drives its competitors out of business, it would not be able to raise retail prices and recoup foregone profits, because other entities would then acquire the competing licenses. *Id.* Such tactics could also result in antitrust suits, as well as adverse regulatory action.

¹⁰⁷ See NERA Study at 10-14, 26-27.

¹⁰⁸ See NERA Study at 26-27. It is notable that LEC affiliates have been active in acquiring cellular and paging systems in areas where they are not affiliated with the local LEC. NERA concludes:

Presumably, telephone companies are the most knowledgeable about the real risks from anticompetitive conduct on the part of the wireline cellular carriers. Thus, their enthusiastic acquisition of out-of-region non-wireline franchises is powerful evidence that wireline participation is not a deterrent to competition.

Id. at 27.

¹⁰⁹ See NERA Study at 28-29.

when it considered whether to allow LEC affiliates to offer cellular service. In 1981, the Commission found that cellular service would not be a competitive substitute for wireline telephone service because of the cost, size, and weight of the cellular handset and because of the capacity limitations on cellular systems posed by the limited spectrum allocation. Accordingly, the Commission held:

[T]here is no reason to rule wireline carriers ineligible out of concern that they will have a disincentive to advance the development of the cellular system because of its short term potential replacement of their local landline service.¹¹⁰

The FCC's 1981 conclusions regarding the horizontal competitive effects of LEC cellular entry are equally valid with respect to LEC entry into PCS. NERA states succinctly:

Substitution between PCS and landline service is a much-discussed, tantalizing possibility, offering the hope of cutting the copper umbilical cord so that people can call people instead of places. Despite these hopes, however, . . . PCS and landline services do not compete in the same product market. Thus *supply of both services by the local exchange carrier would have no horizontal anticompetitive effect.*¹¹¹

NERA notes that cellular service is much more expensive than landline service. Even if the cost to the subscriber of PCS is half the price of today's cellular service, "PCS will still be significantly more expensive than landline service."¹¹²

Accordingly, competitive considerations do not warrant restricting LEC eligibility. The lack of equivalence of PCS and landline service is reinforced by the fact that the wireline plant used to provide landline telephone service is in the midst of a transition to a new, digital era. New services such as Integrated Services Digital Network ("ISDN") are now being introduced that will greatly enhance the capacity of copper wire subscriber loops to carry voice and data. These new services take advantage of the fact that a subscriber loop is a dedicated circuit between the subscriber's home or office and the LEC's switching facilities. Because the modulation techniques used to provide a

¹¹⁰ *Cellular Radio Service*, 86 FCC 2d at 484.

¹¹¹ NERA Study at 29 (emphasis added).

¹¹² *Id.* at 30.

voice channel over radio facilities provide much less bandwidth than the subscriber loop facility, radio is unlikely to provide capacity similar to that of copper wire at a comparable cost.

Furthermore, many wireless system advances will use low bit rate voice encoding to increase system capacity while retaining good voice quality. Future systems, such as CDMA (Code Division Multiple Access) and E-TDMA (Extended TDMA) will also use techniques such as variable rate voice coders or DSI (Digital Slot Interpolation) to further increase capacity by taking advantage of the pauses in normal voice conversations. These techniques will not offer a comparable increase in data transmission capacity. Under these circumstances, PCS can hardly be expected to be widely substitutable for landline service.¹¹³

There are additional reasons for allowing LECs to participate in providing PCS directly to subscribers. For example, the technology used for PCS may be suited, under some circumstances, for delivery of local loop services via wireless, instead of landline, transmission. This is unlikely to occur in so widespread a fashion as to make PCS fully competitive with landline service, as explained above. Nevertheless, there are numerous instances in which wireless technology may be the preferred means of delivering local exchange service.

Moreover, as the local exchange marketplace is opened to increasing competition,¹¹⁴ it is essential that LECs not be precluded from using technology available to their competitors, in order to avoid disadvantaging customers.¹¹⁵ As Commissioner Marshall has stated, the Commission's local

¹¹³ In any event, BellSouth suggests that even if there were some reason for significant competitive concern, it would be minimized to the point of triviality if the Commission decides, as it should, to license five providers.

¹¹⁴ See, e.g., *Expanded Interconnection*, CC Docket 91-141, *Report and Order and Notice of Proposed Rulemaking*, FCC 92-440 (Oct. 19, 1992).

¹¹⁵ See Doyle Study at 14-16. Dr. Doyle discusses the fact that limitations imposed on the ability of fixed operators to provide mobile services in the United Kingdom has slowed the development and wide-spread provision of new personal communications services. He submits that bi-directional convergence of fixed and mobile communications services will provide significant consumer benefits and should be permitted. *Id.*

exchange competition policies must be fairly balanced, "so that [the LECs] would not be hamstrung from competing with alternative access carriers."¹¹⁶ If a LEC is permitted to hold a PCS license, this would permit the LEC to take advantage of the technology for providing local loop application services, where appropriate, on either a temporary or permanent basis.¹¹⁷

E. Auctions Should Be Used for Licensing

BellSouth strongly endorses the Commission's proposal to use auctions for awarding licenses to PCS providers.

1. There Should Be Minimal Requirements to Bid

An auction will allow spectrum to flow promptly and directly toward its highest-valued use. As a free-market process, the auction is ideally suited to this goal. Administrative processes such as hearings and lotteries lead to far less desirable results from an economic perspective.¹¹⁸ The result of an auction will also tend to be more desirable from the viewpoint of the public interest, except where there are important non-economic factors to be considered.

¹¹⁶ *Id.*, Separate statement of Commissioner Sherrie P. Marshall at 1.

¹¹⁷ For example, a natural disaster such as a major storm may damage a large number of subscriber loops, many of which are outdoors, as well as major distribution facilities. If the LEC is a PCS licensee, it will be able to utilize wireless technology for temporary replacement of local loops as soon as the trunk lines and other distribution facilities have been restored. Cellular facilities are frequently used now to provide public telephone service under these conditions, but PCS would make it possible to provide restoration of private telephone service more promptly and efficiently. An LEC may also be able to provide local exchange service using wireless PCS technology at a lower cost, or more promptly, where construction of landline facilities would significantly affect environmentally sensitive areas. Further examples of the use of wireless technology for the provision of landline-equivalent service are discussed in Section II.B.2, in connection with BellSouth's proposal for licensing specialized local-loop PCS providers.

¹¹⁸ As NERA states:

The ultimate economic goal of spectrum allocation is to facilitate the flow of spectrum towards its highest valued use, a task for which free markets are especially well-suited and for which administrative processes are not.

NERA Study at 33.

Those participating in an auction must balance, in economic terms, considerations of spectral efficiency, the nature of the service to be offered, demand for service, pricing, and a plethora of other factors, in order to place a dollar value on the right to hold the license. In a free market system, this is how all goods are valued: by informed bidders competing in the marketplace.

An auction will tend to result in the use of a license that has the most benefit to society, in that the winning bidder has identified a use that will, in the bidder's judgment, result in services with a higher market value to customers than the uses identified by other bidders. Any bidder may underestimate or over-estimate the value. Goods bought at auction sometimes are resold at a profit to another buyer with a higher-valued use, and the bidder may also be incapable of recovering its cost. On average, however, an informed marketplace will make better judgments than any set of administrative decisional criteria.¹¹⁹

The Commission should impose few requirements on bidders for participation in auctions. In general, these should be related to the creditworthiness of bidders or the prevention of fraud and bid-rigging. If the Commission conducts the auction itself, it may be appropriate to require bidders to post a substantial deposit, to establish credit, and to pay a reasonable fee to cover the cost of administering the auction process.¹²⁰

¹¹⁹ See NERA Study at 33-35.

¹²⁰ If a filing fee is required, the Commission should obtain specific statutory authorization. Section 8(g) of the Communications Act, 47 U.S.C. § 158(g), specifies the statutory filing fees. This section would have to be amended to collect a fee for any service not specifically included.

Any attempt to characterize a new service such as PCS as falling within an existing category, such as private land mobile radio or cellular, would be highly infirm, and if a fee multiplier is used to attempt to extract a high fee, the legal challenge would be even more likely to prevail. See Petition for Reconsideration filed by the Committee to Preserve Statutory Fees in Gen. Docket 91-2, *Interactive Video and Data Service* (filed September 3, 1992).

BellSouth's proposed auction legislation in Section II.E.4, *infra*, includes a filing fee provision.

Because the Commission does not have any experience in devising and conducting auctions, it might be more appropriate to contract with an experienced, qualified, auction house to conduct the auctions. This would have several advantages. First, the Commission would not have to train its staff to conduct auctions or establish detailed rules and administrative directives to govern the process. This would entail significant cost savings. Second, practically no staff resources or space would have to be devoted to conducting auctions or reviewing creditworthiness. This would also conserve budgetary resources. Third, the use of an outside auctioneer would permit the auction to be conducted at no cost to the government.¹²¹ Finally, the use of an experienced auction house would likely result in auctions that are conducted expertly and result in maximum financial benefit to the government.

The winner of the auction should be required to pay a specified percentage of the winning bid, either immediately after the auction or within a specified time. This should be a non-refundable payment in order to ensure the bona fides of the bidder. The auctioneer's fee should be deducted from this payment. Nonpayment of this sum would result in the license being re-auctioned as soon as possible.

2. The Winning Bidder Should Have to Demonstrate its Legal, Technical, and Financial Qualifications

After the auction, the winning bidder, or the bidder's assignee,¹²² should have a specified period (*e.g.*, 30 days) within which to file an application for a PCS license that demonstrates its technical and financial qualifications.

¹²¹ Auction houses typically are paid for their services by either a commission deducted from the winning bid, a premium paid on top of the winning bid, or a combination of the two. Auction houses may charge a fee if a license is not sold, but this fee could be paid by deduction from the proceeds of other license auctions.

¹²² The winning bidder should be permitted to assign its rights between the time of the auction and the time its application is to be filed. In either case, the party filing the application must demonstrate its entitlement to do so (*i.e.*, show that it is the winning bidder or the bidder's assignee).

The application should demonstrate the applicant's legal qualifications (*e.g.*, compliance with ownership, real party in interest, and similar rules). The application should describe the nature of the system to be built and the technology to be employed. It should not be extremely detailed and should not involve engineering for specific sites. The applicant should be required to demonstrate its technical qualifications for carrying out its proposal.

Most important, the applicant should be required to demonstrate its financial qualifications. However, the latter showing should not resemble the showing that has been typically required of applicants (*e.g.*, cost of construction and one year of operation) because an auction is very different from traditional licensing regimes. In an auction, the Commission would be relying on market forces to regulate licensee conduct to a much greater extent, and here the bidder is putting his bid valuation at risk. Thus, instead of a traditional construction/operation cost showing, the financial showing after auction should be the applicant's tendered payment of its winning bid. This could be satisfied in one of three ways: (1) tender of the balance due; (2) submission of a note for the balance due, payable in installments over an appropriate period, at an appropriate floating interest rate;¹²³ or (3) a tender of partial payment, with a note for the remainder.

Permitting the bid amount to be paid by an initial payment, followed by installments over several years, would enable smaller businesses to participate in the auctions. Otherwise, these businesses might not be able to pay the full value of a license immediately, especially because they will face substantial costs in constructing and operating a system. This is similar to the payment plans used in cellular license transactions. It is not unusual for sales of cellular licenses to small or

¹²³ BellSouth suggests that appropriate terms for the note might be quarterly payments, starting after two or three years, over a seven- or ten-year period, at the same interest rate imposed by the Treasury on late tax payments. This presumes that the bidder has been required to pay a substantial portion, such as 20%, immediately after the auction, as discussed above.

medium-sized businesses to involve a combination of cash payments and notes. Many cellular sales involve the grant of a security interest to the noteholder to ensure payment.

Under either payment method (2) or (3) described above, the winning bidder would receive a conditional license. The condition would be deleted from the license only upon full payment by the winning bidder, or its successor in interest, of all outstanding principal and interest due. Any failure to make a payment under the terms of either type of note would result in automatic cancellation of the license pursuant to the condition and acceleration of the entire balance due. This should prevent parties from taking liberties with payment terms. By conditioning the license *ab initio*, the Commission would avoid the need for a time-consuming, cumbersome license revocation proceeding.

Once the application is filed, it should be immediately reviewed and the applicant should be permitted a short period in which to file corrections, amendments, and similar information. It should be subject to public notice and petitions to deny, in the event it involves common carrier service and is therefore subject to 47 U.S.C. § 309(b). The Commission should permit the applicant to file any and all amendments needed to address issues raised in petitions, in order to avoid controversies about acceptability of the application, qualifications of the applicant, or similar matters. These measures, taken together, will result in the speediest possible delivery of service by providing as few opportunities for litigation and controversy as possible.

3. No Restrictions on Post-Grant Alienation

BellSouth recommends that the Commission not place any restriction on alienation of licenses. Of course, an assignment or transfer application would have to be filed to permit review of the proposed new owner's qualifications and grant of the application would be a prerequisite to closing on the transaction. Specifically, there should be no "holding period," no requirement to construct

before transfer, and no limitation on the eligibility of the transferee based on the transferee's status as a cellular licensee or LEC.

These preceding restrictions interfere with market forces and prevent the spectrum from moving promptly to its most valuable use. Moreover, holding periods and construction requirements have the effect of giving the licensee incentives to act contrary to the public interest. A licensee who can sell only after constructing, or after constructing and operating for some period, may invest as little as possible in order to meet the FCC's requirements, resulting in inferior service up until the time the new licensee expands the system. Another perverse effect is that such requirements tend to induce licensees to engage in contractual relationships with potential buyers that give the buyer the ability to participate substantially in construction or operation. These relationships often skirt, or even cross over, the boundaries of licensee control. Exit restrictions give licensees precisely the wrong incentives and should not be imposed. A licensee who wants to sell should be permitted to do so on acceptable terms as soon as possible.

Moreover, the Commission need not, if auctions are used for licensing, impose substantial service and coverage requirements on the licensee, as might be required if a lottery were used. This is because one who pays a price based on market value for a license will have an incentive to use that license to provide services that represent the most efficient and productive economic use. Licensees will not "warehouse" spectrum after paying a market price for it. Furthermore, coverage requirements are unnecessary, because the marketplace will provide the necessary service incentives.

4. Proposed Enabling Legislation

BellSouth suggests that the Commission recommend to Congress enactment of the following proposed legislation:

1. Section 309 of the Communications Act of 1934, 47 U.S.C. § 309, is amended by the addition of new subsection (j) to read as follows —

- (j) (1) The Commission shall have authority to utilize a system of competitive bidding for licensing spectrum allocated after January 1, 1993 for new personal communications services, as that term is defined by the Commission in Dockets 90-314 and 92-100.
- (2) The Commission shall have authority to establish by rule the terms of payment for any license awarded by auction.
- (3) Any person may bid in such auction upon complying with the procedures established by the Commission and payment of the required fee.
- (4) The winning bidder, or its assignee, shall have the exclusive right to file an application for the license at issue.
- (5) The procedures of paragraph (i)(2) shall be applicable to action on such applications.
- (6) The payments for any license awarded by auction, net of any costs, shall be due and payable into the General Fund of the United States Treasury. If the Commission permits any part of such payment to be made over time, the payor's obligation shall be evidenced by an interest-bearing note payable to the United States of America in a form approved by the Secretary of the Treasury, *provided* that any default in payment on such note that is not cured within thirty days of notification of default shall cause the full amount of such note to become due and payable immediately and shall cause the license to be cancelled automatically.
- (7) The Commission shall have authority to utilize private auctioneers for conducting competitive bidding.

2. Section 310(d) of the Communications Act, 47 U.S.C. § 310(d) is amended by inserting the following language at the end of the first sentence thereof:

, provided, that any note due and owing by the licensee at the time of such transfer, assignment, or disposition shall have been satisfied in full and cancelled by the Treasury prior to consummating such transfer, assignment, or disposition.

3. Section 8(g) of the Communications Act, 47 U.S.C. § 158(g), is amended by adding the following item 4 to the end of the table entry, "Miscellaneous Charges":

4. Personal Communications Services (per system)
- | | |
|---|--------|
| a. Auction participation | XXX.XX |
| b. New license | XXX.XX |
| c. Renewal of license | XXX.XX |
| d. Modification, assignment, or transfer of control of license .. | XXX.XX |
| e. Notifications | XXX.XX |

4. The Federal Communications shall enact rules and regulations for initial implementation of auctions within 180 days of the effective date hereof.

III. THE COMMISSION MUST IDENTIFY ITS REAL AGENDA — INCREASED CELLULAR COMPETITION OR NEW SERVICES AND TECHNOLOGIES

A. Identifying the Commission's Real Agenda Here Is Legally Required

1. The "Reasoned Decisionmaking" Requirement Will Not Be Satisfied Unless the FCC Defines Its Primary Goal

The caption in this docket states that the sole purpose here is the establishment of a regulatory program to license *new* Personal Communications Services ("PCS"). The *NPRM* at times, however, diverges from encouraging new technologies and services and instead appears to assume that PCS will be no more than a new source of cellular competition.¹²⁴ The mixed emphasis in the *NPRM* as to the core goal makes it unclear whether the Commission is truly seeking to encourage the development of *new* technologies and services for the future, or instead attempting to merely address today's domestic cellular service market.

¹²⁴ The Commission's commitment to *new* services is in question because the *NPRM* states that the agency views PCS as a vehicle for increasing the level of competition in existing services: "The establishment of PCS also is warranted as a way of introducing additional competition to current mobile radio services." *NPRM*, 7 FCC Rcd. at 5688. The Commission repeatedly focused on PCS as a competitor with cellular service in particular:

We also believe it important that each PCS licensee be provided enough spectrum to be competitive with existing telecommunications services such as cellular, SMRs, and others, both in terms of existing service as well as new PCS-like services cellular operators are deploying. Currently, the cellular service is allocated 50 MHz, with each licensee assigned 25 MHz. We believe that PCS licensees should be assigned a comparable amount of spectrum.

Id. at 5691. The mistaken notion that PCS is essentially identical to cellular, or should be dedicated to providing competition with cellular, is woven throughout the fabric of the *NPRM*. *E.g., Id.* at 5691, 5697, 5700-07, 5712-13, 5721. Some of the policies proposed are oriented toward creating new cellular competitors, rather than new services. The issue of whether PCS is intended to be principally a competitor to cellular or a means of delivering new services is pointedly drawn by paragraphs 115 and 116 of the *NPRM*, where the Commission sets forth two options for the height and power limits to be applied to PCS. In paragraph 115, the Commission proposed "small cell configurations" typical of the PCS experiments. In paragraph 116, however, the Commission proposed as its second option 1000-watt base stations with 1969-foot high antennas, and 200-watt mobiles, specifically in order to "accommodate high speed vehicular subscribers." *Id.* at 5721.

The Commission has a well-established legal obligation to define its real agenda¹²⁵ and then adopt a regulatory structure that attempts to satisfy that objective.¹²⁶ Creating a regulatory structure without defining the true agenda would be legal error because the reviewing authority has no framework for judging whether the agency has engaged in "reasoned decisionmaking."¹²⁷

The guiding principles in establishing a rational regulatory regime change depending on whether the goal is to foster the development of a new personal communication service or to merely clone cellular. If the Commission's real agenda here is to create a cellular-clone, it must say so and begin a new proceeding, compile a relevant record, and develop rules guided by the principle of a "level playing field." If the goal is new technologies and services, BellSouth's low-power microcell proposal should be adopted. The values the Commission has set out cannot be rationally applied until the Commission sets the agenda.

At a minimum, the regulatory structure adopted must be consistent with the purpose for which spectrum is being allocated and the record of the proceeding.¹²⁸ The interrelated *Emerging Technologies* docket created a spectrum reserve for a very specific purpose: "future communications services that employ emerging technologies."¹²⁹ The *Notice of Inquiry* and the *NPRM* spoke of the

¹²⁵ See, e.g., *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 850-52 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971).

¹²⁶ The Commission's burden of explaining its decision here is heightened by its previous judgment that the spectrum involved should be devoted to another purpose: private microwave service. See *Action for Children's Television v. FCC*, 821 F.2d 741, 745 (D.C. Cir. 1987), *see also State Farm*, 463 U.S. 29 (1983); *Greater Boston*, 444 F.2d at 852.

¹²⁷ See *Mountain States Telephone & Telegraph Co. v. FCC*, 939 F.2d 1021, 1035 (D.C. Cir. 1991); *see also Western Union Corp. v. FCC*, 856 F.2d 315, 318 (D.C. Cir. 1988).

¹²⁸ See *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962) (There must be a "rational connection between the facts found and the choice made.").

¹²⁹ *Emerging Technologies R&O* at ¶1.

demand for "new services and technologies"¹³⁰ and cited "revolutionary" new services,¹³¹ and the Commission committed itself to "allow the widest possible range" of new services.¹³² The Commission cannot establish a licensing regime here based on a different purpose.

In the 1970s, the Commission had to make a strikingly similar choice after establishing the 800 MHz land mobile spectrum reserve. The Commission wisely set its sights on the future and provided spectrum for new technologies, services, and means of delivering service — cellular radio, trunked private dispatch service, and the specialized mobile radio ("SMR") system.¹³³ That decision has paid off. Cellular radio is not merely a competitive clone of conventional mobile telephone service. It is a new and dynamic service serving far more people than was thought possible, while making a transition to the technology of the 1990s. Trunked systems and SMRs are not merely competitive clones of conventional dispatch systems; they are far more innovative and efficient ways of making private radio service available and, they too, are incorporating the technology of the 1990s. As the Commission has recently observed, the establishment of cellular, trunked radio, and SMR service has led to the result that:

U.S. domestic telecommunications products lead the world in meeting public demand and in using innovative technology. Further, because of the opportunities created by this allocation, American companies enjoy a position of global leadership in radio technology that has resulted in strengthening our competitiveness in international markets, particularly with regard to trunked and cellular radio systems.¹³⁴

¹³⁰ *Notice of Inquiry*, 5 FCC Rcd. at 3995; see *NPRM*, 7 FCC Rcd. at 5678.

¹³¹ *NPRM*, 7 FCC Rcd. at 5678.

¹³² *Id.* at 5688.

¹³³ See *Land Mobile Radio Service*, Docket 18262, *Second Report and Order*, 46 FCC 2d 752 (1974), *recon.*, 51 FCC 2d 945, *clarified*, 55 FCC 2d 771 (1975), *aff'd sub nom. NARUC v. FCC*, 525 F.2d 630 (D.C. Cir.), *cert. denied*, 425 U.S. 992 (1976).

¹³⁴ *NPRM*, 7 FCC Rcd. at 5686-87.

This happened because the Commission was looking to the future, not the past, when it established these services. It should do so in this proceeding as well. Allowing a diverse group of proven carriers and new entrants into the new PCS service will create service competition between cellular and PCS providers as a desirable byproduct of the creation of New-PCS.¹³⁵

2. Unless the FCC Defines the Agenda as Creating a New Service, It Will Be Treating Identically Operating Licensees Differently

It is well-established that the Commission must treat similarly situated licensees in the same manner.¹³⁶ In fact, extreme cases of discriminatory treatment are constitutionally suspect.¹³⁷ If the Commission fails to define its agenda here and allows PCS licensees to create high power cellular clones in direct competition with cellular, *Melody Music* problems will be created. A PCS licensee which operates in a manner indistinguishable from a cellular provider should be subjected to the same rules and jurisdictional requirements. It is legal error to take the approach that the licensee can operate however it wants, and when it operates in an identical manner to other carriers, it need not be subject to the same service rules.¹³⁸ If the specific purpose of a new regime of licensees is to provide competition for cellular licensees, logic, simple fairness, and Commission decisions dictate that the ground rules for the new and old competitors be the same.¹³⁹

¹³⁵ The Commission recognized that there would inevitably be some degree of competition between PCS licensees and the providers of existing services, such as cellular, SMR, paging, and others, because of the potentially wide variety of services a PCS licensee might offer. *NPRM*, 7 FCC Rcd. at 5712.

¹³⁶ See *Melody Music, Inc. v. FCC*, 345 F.2d 730, 733 (D.C. Cir. 1965); *Public Media Center v. FCC*, 587 F.2d 1322, 1331 (D.C. Cir. 1978).

¹³⁷ See, e.g., *Beach Communications, Inc. v. FCC*, 959 F.2d 975, 985-87 (D.C. Cir. 1992).

¹³⁸ See *National Ass'n of Broadcasters v. FCC*, 740 F.2d at 1200-05.

¹³⁹ See *Bundling of Cellular Customer Premises Equipment and Cellular Service*, 7 FCC Rcd. 4028, 4032 (1992) ("*Cellular Bundling*") ("we wish to emphasize that our responsibility is to assure that the public interest, including maintaining a level playing field and fostering competition, maximizes benefits to subscribers.").

Moreover, it would be unreasonable to classify new companies intended to compete against cellular licensees as private carriers exempt from state regulation, while cellular licensees remain common carriers whose rates and practices are regulated by the public utilities commissions in many states.¹⁴⁰ The California Public Utilities Commission's recent decision to institute rate regulation and impose other regulatory policies on cellular carriers illustrates the seriousness of the effects of regulatory distinctions at the state level between cross-elastic services.¹⁴¹ It would not be reasonable to grant the new competitors much higher power or permit them to use much higher antennas than cellular carriers, if fair competition is the Commission's objective. It would be equally unreasonable to relieve the new competitors from ownership rules that are applicable to cellular carriers.

The competitive imbalance that such policies would create cannot simply be dismissed by eliminating restrictions imposed on the cellular carriers by regulation, such as the separate subsidiary rule imposed on cellular operations of the Bell Operating Companies,¹⁴² or the analog cellular compatibility requirement.¹⁴³ Cellular carriers have built their businesses around these regulatory restrictions and eliminating them prospectively does not free the carriers from their effects immediately. These rules will have effects that will linger long after they are lifted.

¹⁴⁰ See *NARUC v. FCC*, 525 F.2d at 644 ("If practice and experience show the SMRS to be common carriers, then the Commission must determine its responsibilities from the language of the Title II common carrier provisions.").

¹⁴¹ See *Investigation on the Commission's Own Motion Into the Regulation of Cellular Radiotelephone Utilities*, Docket I.88-11-040, *Decision* 92-10-026 (Cal. PUC Oct. 6, 1992), *petitions for recon. pending*. The Commission may wish to consider whether the California PUC's *Decision* is contrary to the Commission's policy regarding federal/state jurisdiction over cellular service or will interfere with the introduction of spectrally efficient technology.

¹⁴² *NPRM*, 7 FCC Rcd. at 5706; see 47 C.F.R. § 22.901.

¹⁴³ *NPRM*, 7 FCC Rcd. at 5704-05; see 47 C.F.R. §§ 22.915(a), 22.930.